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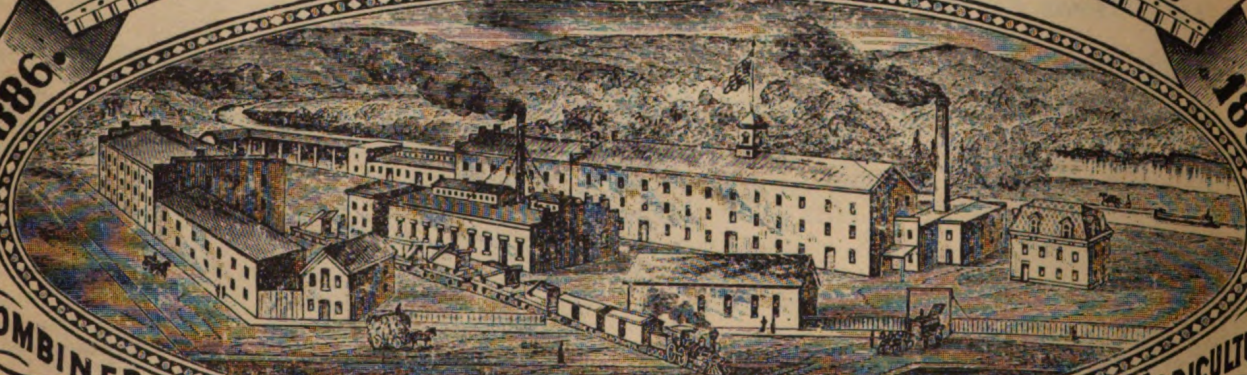
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THE WESTINGHOUSE COMPANY.

INCORPORATED
-1883-
SCHENECTADY, N.Y.



COMBINED
GRAIN & CLOVER

MANUFACTURERS OF

AGRICULTURAL
ENGINES & HORSE POWERS

THRESHING MACHINES & ENGINES.

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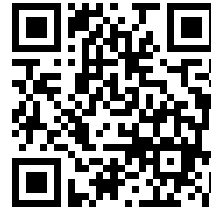
H. H. CLARK, Agent,

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CONTENTS.

	PAGES.
GRAIN THRESHING MACHINES, - - - - -	2, 3, 4, 5, 6
COMBINED CLOVER AND GRAIN THRESHERS, - - - - -	8, 9
LEVER HORSE POWERS, - - - - -	10
THREE AND FOUR-HORSE TREAD POWER MACHINE, - - - - -	12
TWO-HORSE " " " - - - - -	13
PLAIN AGRICULTURAL ENGINES, - - - - -	14 15, 16
TRACTION ENGINES, - - - - -	18, 19, 20
SAW MILL, - - - - -	21
PRICE LIST, - - - - -	28, 29
TESTIMONIALS, - - - - -	7, 11, 17, 21-27

ANNOUNCEMENT

This folder is a reprint of the 1886 catalog of the Westinghouse Company. A limited number have been made available for collectors and those interested in Historical Steam Traction Engines and Threshers.

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1886.

CATALOGUE OF MACHINERY

1886.

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WESTINGHOUSE COMPANY,

inc.)

SCHENECTADY, N. Y.

Organized 1836.

Incorporated 1883.

We present herewith our Annual Catalogue, containing illustrations and descriptive articles of improved labor-saving machines, manufactured by us, and invite the careful attention of those who may be desirous of purchasing such machinery to the statements and matter relating to it contained herein.

Our specialties are Grain and Clover Threshing Machines, Portable and Traction Engines, ranging from Six to Fifteen Horse-power; Horse-powers of various sizes and patterns, and Portable Saw Mills.

The present organization of our company is a continuation of the business commenced in 1836, and all connected with it have had unusual experience in the manufacture and operation of machinery of the kind we now offer. We have, therefore, the most thoroughly tested articles, and those of established reputation, and nothing whatever of an experimental nature to offer our customers; and we feel the utmost confidence in being able to satisfy any and all who purchase of us, as far as the quality of our machinery is concerned.

Our facilities for manufacturing are of the best, consisting of abundant buildings, machinery and material, so that we are prepared to supply a large demand, and we respectfully solicit continued favors from former customers and correspondence with all who are interested in machinery of the kind we manufacture.

The following are the principal machines we manufacture:

Bean Thresher.

Five sizes of Grain Threshing Machines.

Four sizes of Combined Clover and Grain Machines.

Six, Ten and Fifteen Horse-power, Portable Engines.

Six, Ten and Fifteen Horse-power Self-Propelling or Traction Engines. Portable Circular Saw Mills.

Two, Three and Four Horse Tread Powers.

Four, Ten and Twelve Horse Lever Powers.

Address all Correspondence to

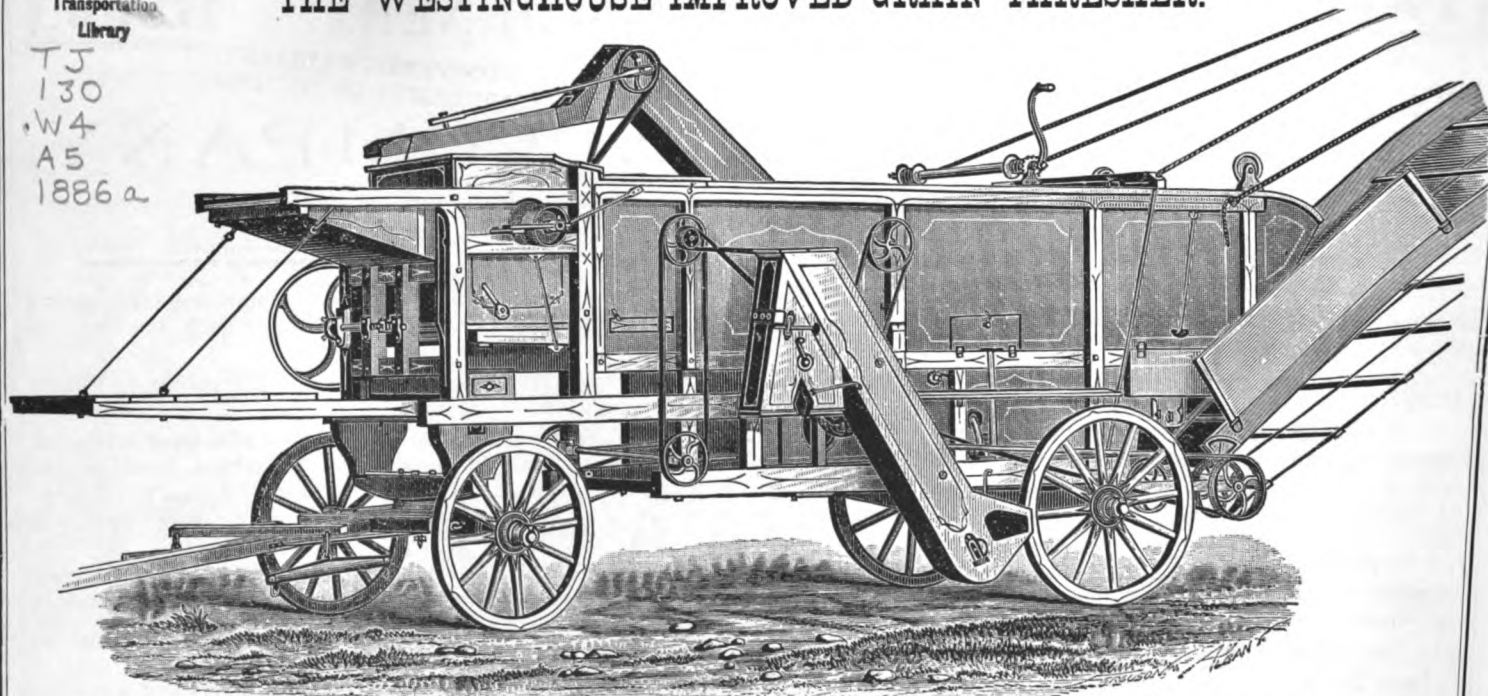
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THE WESTINGHOUSE IMPROVED GRAIN THRESHER.



This machine is of the Vibrating Separator pattern, and has been prominent in our manufactures, as well as in public use, for twenty years. It has therefore NO EXPERIMENTAL ELEMENTS, nor anything but what has been proven by actual and long continued service to be PRACTICAL AND EFFICIENT. In its construction we have aimed to make a strong and substantial machine, and one which can be depended upon to perform a large amount of work in the very best manner. To accomplish this has required a liberal expenditure of time and money in testing changes and improvements, and in endeavors to determine what were or were not essential and desirable qualities of such a machine. A largely increasing demand for them is an evidence that our efforts to place them in the front rank as Grain Savers has not been without result, and it may be relied upon that the present stock will fully equal any heretofore made or at present in the market.

We desire to call attention to some prominent and important qualities peculiar to the Westinghouse Machine, which are:

1st. The improved BAR CYLINDER AND CONCAVE. This portion of a Grain Thresher is one of the original and indispensable elements, and the general usefulness of the machine is largely dependent upon the perfect construction and operation of this part. In order that the efficiency of our machines might be increased in this particular, we designed and adopted our improved form of cylinder bar, which consists of iron rolled in channel shape instead of the customary flat bar. In the channel is fitted a bar of wood and the spikes pass through both the iron and wood bars, the wood being the support of the burrs or nuts. As a result we have additional strength and a combination of material which prevents the nuts from working loose, and diminished liability to breakage of spikes. This improvement has been received with great favor by threshermen, and their frequent expressions are, *no loose spikes* and *very few broken ones* in the Westinghouse Cylinders.

The CONCAVE is composed of precisely same kind of bars as are put in the cylinders, and entire uniformity in shape and length of spikes prevails in both cylinder and concave. It is adjustable by simple and effective appliances at both front and rear, and as many or few bars may be used as the condition of grain may require. The form of the feeding table and throat and the shape of the spikes are such as to ensure easy feeding, clean threshing and unusual freedom from dust.

We have therefore a strong and heavy cylinder and an easily adjusted concave, free from the annoyance of constantly loosened spikes, reduced liability of breakage, and in every respect all that can be required of a Threshing Cylinder and Concave.

2d. SEPARATION. This is the all important topic when the subject of Threshing Machines is being discussed. A great deal has been done and much more said, having as an object the "last kernel," but more will be said and done before the perfect point is reached. There are various circumstances and conditions which stand in the way of absolutely perfect separation, among which are great dissimilarity in the quality and condition of grain in different sections of the country, unskillful management on the part of machine operators, and the limit within which

the size of machines must be kept to render them portable. With these things to contend against, we have as we believe made material progress, and have a machine unequaled by any in the market in this particular. The system made use of in our machine consists 1ST, in making AN OPEN CONCAVE, whereby the largest possible separation of the threshed grain and straw may be made permanently at this point. All grain thus separated is conveyed directly to the cleaning mill, and requires no subsequent action from separating devices. Although the largest proportion of the grain is separated from the straw in this manner, there still remains an amount which requires further agitation, and this is done by a combination of the VIBRATING SEPARATOR, REVOLVING PICKERS AND SHAKING FORKS. The Vibrating Separator receives the unseparated grain and straw from the threshing cylinder, and is the medium for conveying the straw to the rear of the machine. The REVOLVING PICKERS assist in moving the straw rearward and also agitates and loosens the straw, so that grain will drop through the perforated bottom of the separator. The SHAKING FORKS add to the agitation of the straw, and by the time it reaches the rear end of the separator the separation becomes complete to the extent of the capability of these several devices. The grain thus separated is conveyed to the mill by a vibrating platform or conveyor located immediately beneath the separator. While it is not pretended or claimed that absolute perfection in separation is thus attained, it must be conceded that we have a combination of all that is practicable to perform this essential operation, and is more than can be found in other machines. Careful tests made for the purpose of determining the amount of waste over the separator have demonstrated that with reasonable management and a fair condition and quality of grain a very small percentage is wasted, and it is with entire confidence in being able to satisfy purchasers that we make use of this plan of separating.

THE CLEANING MILL comes next, and is another of the indispensable parts of the machine. It is not considered a very difficult matter to construct a mill which will clean good grain in a moderate amount, well, but it is quite another thing when the large volume of grain handled by the modern grain thresher and the varying condition and quality of grain which are to be contended with are taken into consideration. It has taken years of experiment to bring our mill to its present state of perfection, and we believe it to be the best in use. Its operation and

construction are as follows: The BLAST is obtained from the ordinary style of fan. The SHOE has a peculiar movement which operates upon the grain in the most effective manner for separating the grain from the chaff, has a short endwise as well as a rising and falling motion, which is ample for all cleaning purposes, but is not sufficient to shake up the machine and all its surroundings as does the common "Side Shake" arrangement. The sieves are long and wide and so constructed that they do not require constant attention and watching to prevent clogging.

AN INDEPENDENT SCREEN OR SIEVE is also employed for the purpose of carrying off straw and coarse substances which would otherwise fall upon the cleaning sieves and interfere with their perfect operation. This screen is so efficient in removing the coarse material which passes through the separator, that larger openings are admissible and better separation thereby accomplished. The shoes of all our machines larger than No. 3 are made of two sections. The upper section holds the sieves and has an outward and rising motion, while the lower section which contains the screen and conveys the cleaned grain to the discharge spout has an inward and carrying movement. This method of constructing the shoe, in connection with the means of hanging them, and for communicating motion, makes the one section counterbalance the other, and a steady motion is thereby obtained. The GRAIN AND TAILING SPOUTS RECEIVE from the shoe connections an independent crosswise action which gives them a large delivering capacity. These improvements in our method of constructing our cleaning mill, we think sufficient to attract the attention of any who may be looking for the best.

In addition to the essential points of a grain machine, described in the foregoing articles, we invite attention to some other features which are of importance when a complete machine is being sought for.

AN IMPROVED SWING GEAR, to connect with horse-power, is one of the desirable points in our horse-power machines. This is an adjustable arrangement which enables the thresher to be set at any angle with the power which may be desired, within a half circle, and at the same time maintain a correct position of the different gears with each other. As almost every "setting" of a machine makes it necessary or desirable to change positions, the advantage of this improvement will be apparent to experienced operators.

For Belt machines our horizontal wheel band jack affords nearly the same conveniences for "setting up" that the swing gear does, and has therefore a decided advantage over the ordinary vertical wheel jack.

AN EXTENSION TUMBLING ROD used in connection with geared machines will take up a variation of two feet in the distance between the thresher and power.

OUR STRAW STACKERS are made in the most convenient form for handling, and can be loaded and carried upon the thresher without taking out the raddles.

We manufacture a substantial and convenient GRAIN BAGGER AND REGISTER. It is made in form of an elevator and receives the grain from the grain spout of the thresher, elevates it to a sufficient height to empty into bags and as each bag or measure is filled, registers the number. This bagger will handle five to six bushels of grain per minute, and is a saving of labor and accurate in tallying.

Summary of special points of interest to be found in our machines :

Large and heavy cylinders made upon the improved plans described in the foregoing.

SEPARATING CAPACITY of the greatest attainable degree.

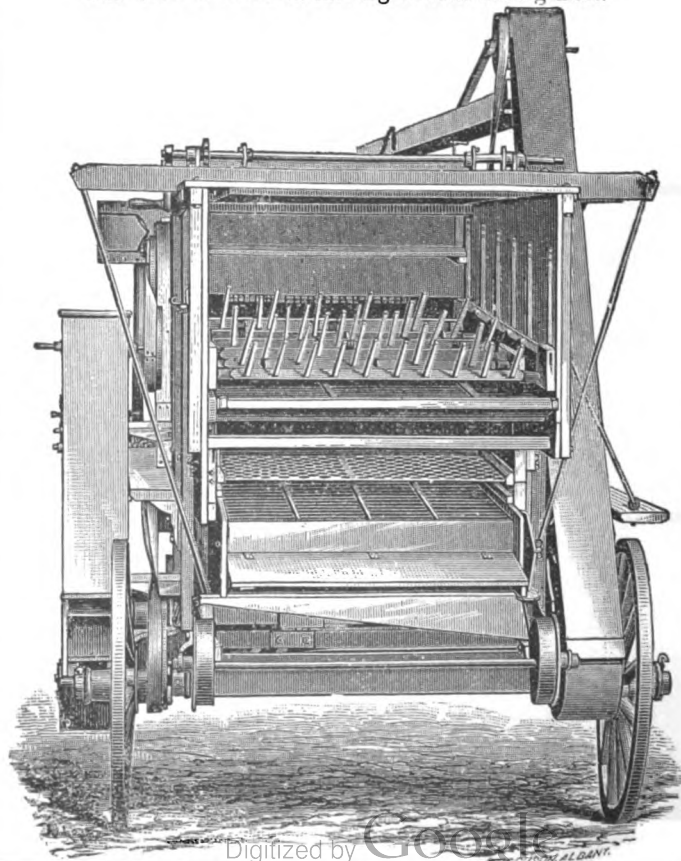
A CLEANING MILL capable of doing a large amount of work in the best manner.

ALL DETAILS OF CONSTRUCTION, such as boxes, bearings and shafts, thoroughly made and applied.

All sizes made with turn under forward wheels and thereby rendered convenient for getting around in difficult places.

Every machine is put in motion before leaving the works, and is therefore certain to be sent out in running condition. They are substantially made, well finished, and nicely painted, and to the best of our ability fitted for doing a large amount of work in the best manner.

End View of Thresher, showing Interior Arrangement.



TESTIMONIALS.

From J. Shearer, Plymouth, Mich., 1882.

The undersigned, having heretofore been opposed to steam power in threshing grain, on account of danger from fire, is now constrained to admit that upon trial of the Westinghouse Steam Thresher, operated by Messrs. Bunyea, Chaffee and Shook, who threshed and cleaned ready for market 250 bushels of wheat in two hours and fifty minutes, at my barn on the 5th instant, and with no loss by waste. The engine consumed only half a cord of soft wood, stove length. The thermometer stood at 100. This extreme heat would have proved dangerous to horses, but the iron horse—muffled in his smoke stack—unconscious of heat or fatigue, did his work bravely. When firing the work above, no intimidation had been given the men.

From I. A. Bottorff and R. S. McAnulty, Golden, Ill., 1882.

We regard the engine superior to any other we have seen. The Separator is all we could ask. It threshes fast, saves all the grain and cleans it fit for market. As a Clover Huller it is equal to any regular Clover Huller, if not superior. In fact we think our Engine and Separator superior to anything else we have seen in our 15 years' experience.

From A. W. Strickler, Golden, Ill., 1882.

I ran Messrs. Bottorff & McAnulty's engine last season. It was my first experience with engines of any kind, but it was so simple and easily understood that I have no trouble to run it successfully. The engine has ample power to run any Separator made. It uses very little fuel and water as compared with many other engines. I think any one who will follow the few plain instructions will find your engines all you recommend them to be.

From Alfred Nelson and Joseph Groves, Bowen, Ill., 1882.

Messrs. H. E. & S. Selby: The Westinghouse Separator we bought of you proved satisfactory. We have threshed wheat, oats, rye and timothy seed satisfactory to ourselves and customers. The riddles give us no trouble, requiring no poking or cleaning by hand. We have been to no expense for repairs except for one breakage caused by an accident, which was no fault of the machine. Our machine is as good as new, except the natural wear of weather and dust on the paint. We recommend the Westinghouse Vibrator to any one wanting a first-class Threshing Machine.

From R. D. Armentrout, Good's Mill, Rockingham County, Va., 1882.

I must say a word for the little engine. It is the nicest running engine I ever saw run. Takes the least wood and water; no trouble whatever to keep up steam to saw with. I can saw from 2 to 4,000 feet of lumber every day. Myself and fireman sawed 1,500 feet in half a day, short days. I am well pleased with the little Westinghouse Engine.

From E. Wilson, Willsbury, Pa., 1882.

I have run a Six Horse Westinghouse Engine about six months, and the more I use it the better I like it. I used it for threshing with a 26 inch cylinder Thresher, but it is too small a cylinder for the power. I am going to get a Westinghouse No 2 Thresher to run with it. I used my engine to run a hay press last winter; have had no trouble in using it in cold weather, and I think with proper care the engine will last as long as a man will care to follow the threshing business. I have found no weak points about my engine yet.

From W. M. Andrews, Franklin, Tenn., 1882.

Messrs. Hillman, Buford & Corbett, Nashville, Tenn.:

In regard to threshers I would say that I have run several different kinds, and unhesitatingly pronounce the Westinghouse the best thresher I ever saw.

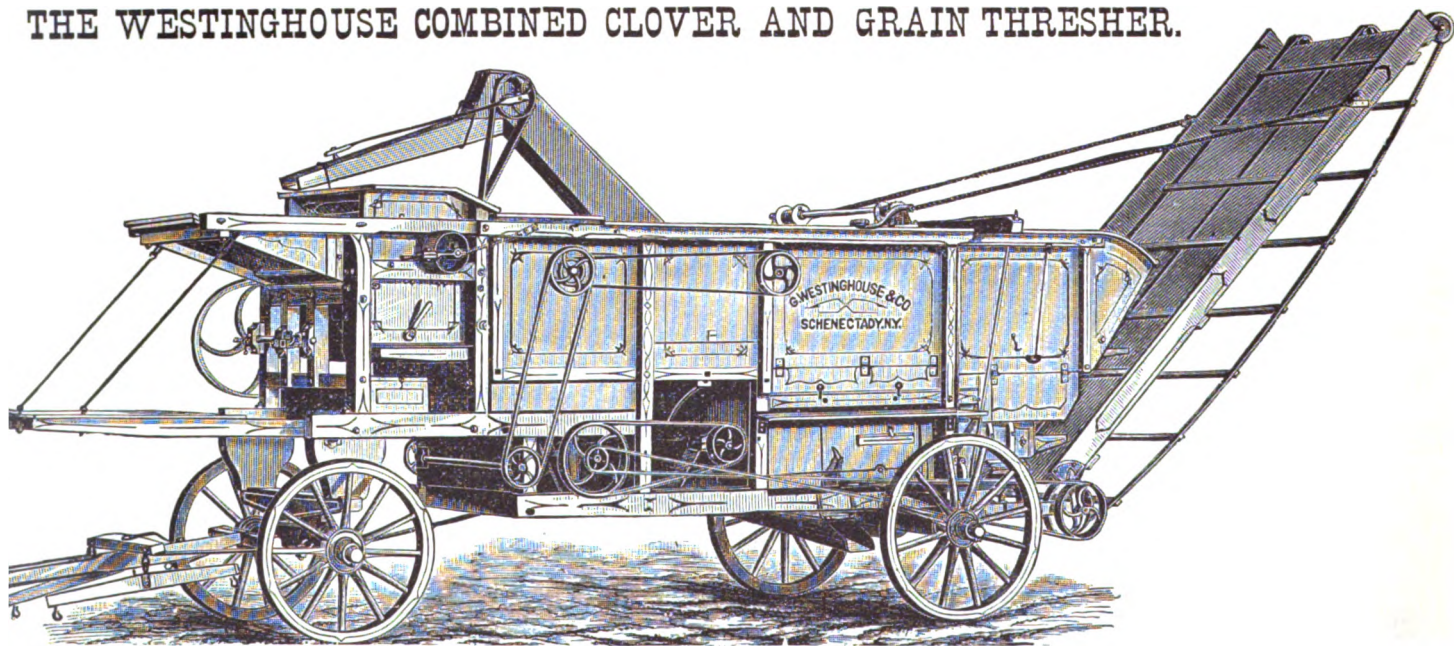
From George Bunyea, Wayne, Mich., 1882.

The Ten Horse Engine and machine I bought of your agent, John Cheney, last fall, gives entire satisfaction. I have threshed many years, owned different kinds of machines, but never saw any equal to the Westinghouse. The farmers all want it because it does not cut the grain, and the engine uses less wood and water than any other, and especially because the engine does not throw sparks, are not afraid of fire.

From S. A. Anderson and David Dunlap, Jr., Blairsville, Pa., 1882.

This is to certify that we are running a Westinghouse Thresher bought of P. H. Soxman, of Latrobe, Pa. It is the seventh Separator that we have owned or had an interest in, and we have found no machine to equal it for a good thresher generally. It cannot be equaled by any other machine in this neighborhood.

THE WESTINGHOUSE COMBINED CLOVER AND GRAIN THRESHER.



This machine has long held a position of importance in sections where both grain and clover are raised, and is therefore void of experimental and doubtful features.

As a GRAIN MACHINE it is in every essential particular the same as our regular Grain Threshers, described in the foregoing articles, and requires no further description than will be found there.

As a CLOVER MACHINE it has all of the indispensable parts of a Grain Thresher, *i. e.*, Threshing Cylinder, Separator and Mill, besides an INDEPENDENT HULLING CYLINDER AND CONCAVE. This independent hulling apparatus we claim as of the greatest importance when saving the seed of clover, in its strict interpretation is the desired end. It is true that many of the Grain Thresher makers advertise clover attachments, which consists mainly of some modification or addition to the regular Grain Threshing Cylinder and Concave, but to one well versed in the clover saving business, any such attachment will quickly be placed among the "make-shifts," where it properly belongs. It is well known that clover seed is difficult to remove from its bolls, especially when green or damp, and that it must pass through a contracted space and receive a thorough rubbing to become separated. The threshing cylinder and concave and the grain separator is effectual in separating the heads from the straw, and the hulling cylinder then becomes important as a means of separating the seed from the heads. Our cylinder is thickly studded with steel spikes and is fitted closely to a finely toothed concave, so that the most thorough rubbing is given the clover heads in passing through them. In no other way can this work be performed so rapidly and perfectly, and it may therefore be asserted, without danger of successful contradiction, that the additional cylinder and concave are requisites of a reliable clover machine.

All the changes required to convert our machine from a Grain to a Clover machine are simple and may be quickly made, and consist mainly in a change of sieves and the place of discharge from the grain carrier. The hulling cylinder may be removed from the machine during the grain threshing season if desired.

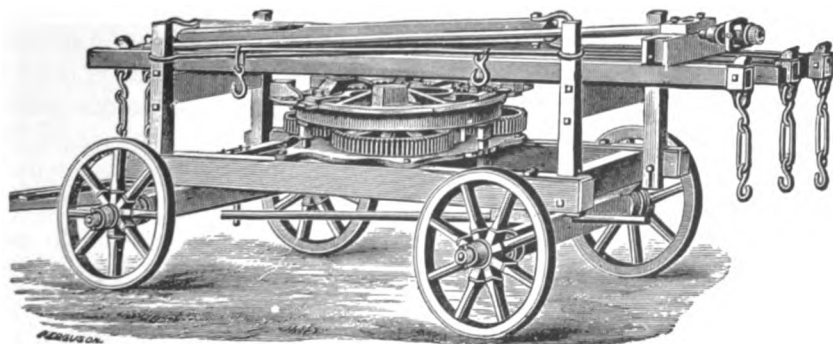
Four sizes of this machine are made, Nos. 0, 1 and 2, corresponding with the same numbers and sizes of our Grain Threshers; and No. 3 with machines generally made especially for clover work.

TABLE OF SIZES OF THE WESTINGHOUSE GRAIN AND COMBINED GRAIN CLOVER THRESHERS.

Size.	Cylinder.	Sieves.	Separator.	Shaking Forks.	Power Required.
OO	12 Bar, 17 inches by 36 inches or 42 inches.	48x40	53 inches.	6	15 Horse.
0	12 Bar, 17 inches by 32 inches or 36 inches.	42x40	47 inches.	6	10 to 12 Horse.
1	12 Bar, 17 inches by 30 inches or 32 inches.	36x40	41 inches.	6	8 to 10 Horse.
2	10 Bar, 15 inches by 30 inches.	36x40	41 inches.	5	6 to 8 Horse.
3	8 Bar, 14 inches by 30 inches.	36x40	41 inches.	4	4 to 6 Horse.
4	8 Bar, 14 inches by 26 inches.	30x40	34 inches.	3	4 Horse.

THE WESTINGHOUSE HORSE POWERS.

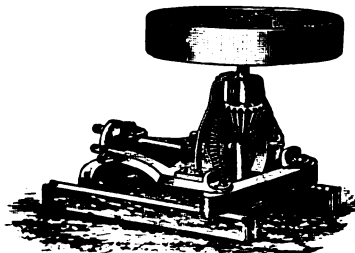
Mounted Power.



Extension Tumbling Rod.



Ground Jack.



Safety Coupling.



The engravings show the plan of Lever Powers made by us, as also our improved Band Jack, Extension Rod and Safety Coupling.

The power is of the pattern commonly known as "triple geared," it having three internal Gear wheels and pinions about and in connection with which the master wheel revolves. No center support or arms for the main wheel is used or required. This power is an exceedingly strong one and when properly made has no superior for lightness of running. To ensure perfect uniformity and accurateness of the position of the gearing, the main frame (which is one piece of casting) is laid out and bored from templates, thereby securing a correct position for the shafting upon which the triple gear revolves. This shafting is of hardened steel and is therefore durable and free from undue friction.

The sweeps or levers are so attached that no bolting is required to keep them in position, and may be quickly removed or placed without the use of any tool. These powers having been made by us for many years and sold with our threshers, are well known as thoroughly reliable ones and equal to any in the market. They are made in two sizes, No. 1 for 8, 10 or 12 Horses (different only in main wheel), and No. 2 for 4 or 6 horses, and either size "down" or "mounted" as may be required. All the usual extras are furnished with them.

TESTIMONIALS.

From E. E. Wafel, Le Raysville, N. Y., March 20, 1885.

I know you make a first class Cleaner because I have seen more than one in use, and the one I have used has given the best of satisfaction. The jobs I do, all my customers say are well done, and my constantly increasing list of patrons speaks for itself.

The Westinghouse Threshers are made of the best of material, and your care in manufacture keeps them up with the times. I can recommend the Westinghouse Thresher every time to any who are thinking of buying or getting a good job done.

Mechums River, Va.

We, the undersigned patrons, after using one of your Six-Horse Engines and No. 3 Thresher, owned by Sandridge & Kirby, believe it to be one of the best outfits for threshing we have ever used. It threshes clean and cleans well. It will thresh from 400 to 600 bushels per day with ease. It is also light to handle and move; one pair of horses can move each piece with ease.

[Signed], C. H. PARROTT,
WM. P. WOODS,
and eleven others.

From Stephen Jude, Spartansburgh, Pa., Feb. 9, 1885.

I have had my Ten-Horse Engine four years, and have never paid out anything for repairs except for packing. I think the Westinghouse Engine the most durable of any I have ever used in this country, and I have been running a steam Thresher for 20 years, and started the first steam Thresher run in America. I have used the Westinghouse Thresher for the last fourteen years, having used two other makes previous to that time, and have bought five machines of you in that time and like them the best of any I have seen.

From R. Arrowsmith, Chiltern, Victoria, Australia.

We threshed with the Ten Horse Engine and No. O Thresher purchased of you, in forty-four different places in five weeks and two days. It soon made for itself a reputation, and it was not necessary, as with other machines, to run ahead and look for work, there being always from three to ten orders on hand, while other machines had a difficulty in obtaining work. In one case no less than six applications were made

to a farmer having 640 bushels of oats to thresh. One machine that has always hitherto had a good run of work, gave up altogether at the end of a fortnight, being run off in fact. The machine has proved a complete success, being in every way adapted to the requirements of these colonies. Several farmers have said to me, "if you introduce another machine like this into the district, the others will have to give up, and you will have the whole of the work to yourself." The engine works splendidly, and is admirably adapted to the work in every respect.

From Moses Hougham, Rosario Tala, Entre Rio, Argentine Republic, S. A.

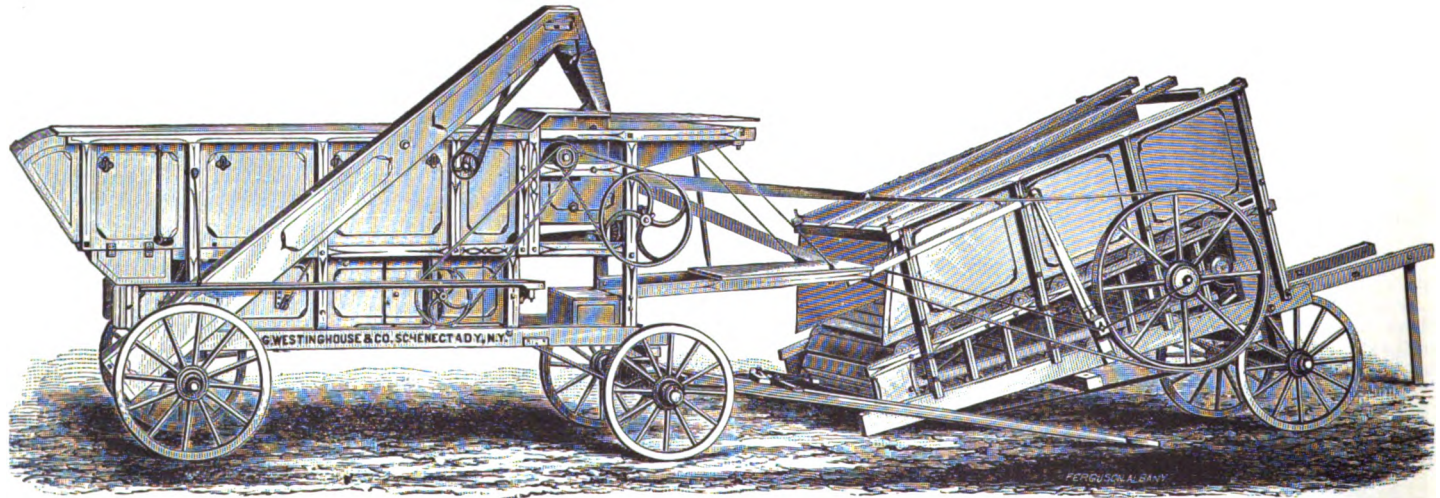
The No. 2 Separator I bought of you has arrived. The Separator works well. I am satisfied that it is a good machine, the best that I have seen in this country. It threshes clean and separates the grain from the straw to perfection. The cleaning mill also works well and runs very steady.

In the first test here in the presence of several persons accustomed to see threshing done by those big English machines, all agree that the "little Yankee thresher" beats them all in every respect, which any blind man can easily perceive. I saw a large—and—Thresher and Ten Horse Strawburner Engine only thresh 300 bushels per day, and it employs 25 men. I feel confident that we can run all those large nuisances out of the country, as with their smooth bar cylinders they waste more than 15 per cent of the grain.

From John Torquer, Sumner, Gratiot Co., Mich.

I have followed threshing for 13 seasons, and in that time have used many different machines. Last season I had the pleasure of running a No. 1 Westinghouse Combined Clover and Grain Thresher and Ten Horse Engine, and must say that the Westinghouse downs them all. We threshed for Harry Parr, of Sumner, Gratiot Co., Mich., 44 bushels of clover seed in five hours, cleaning it in a first-class manner, and went one-half mile to dinner, and filled the tank with water in the meantime. Have threshed 300 bushels of oats in one hour and thirty minutes without stopping, cleaning the oats fit for market. The farmers are better satisfied with this machine than any other, and are anxious to engage us for next season. In regard to the engine, I do not think it has an equal; it is easily handled, requires but a small amount of fuel, furnishes abundance of power, and cannot be fed down.

THE WESTINGHOUSE TREAD POWER MACHINES.



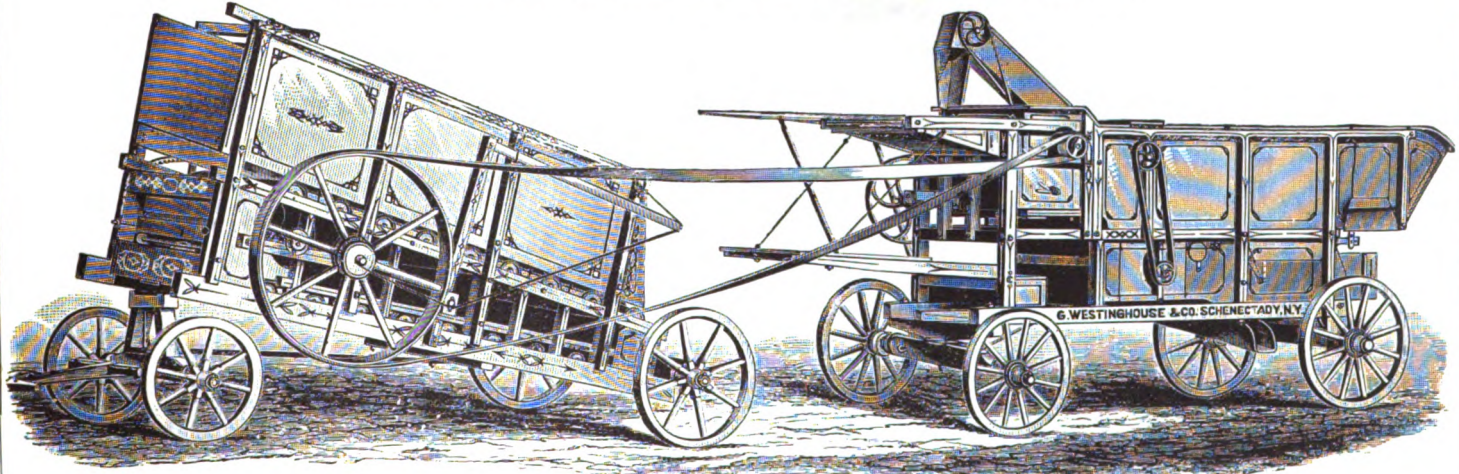
Three-horse Power and No. 3 Thresher.

The above cut represents our Three-horse Machine as set for use. The means for mounting the power are simple and when mounted is easily handled. This power is DOUBLE GEARED, has but 20 PLANK AND TRACK RODS; HAS MALLEABLE STEEL BUSHED LINKS, FIVE INCH TRACK WHEELS, MAIN SHAFTS OF STEEL, AND IN EVERY ESSENTIAL PART FITTED FOR BUSINESS. The gearing affords a steady motion with a slow rate of speed of horses. The wide track planks are sufficiently strong to support the center horse, without additional support on the customary and dangerous cleats made use of on narrow plank powers. The links of malleable iron are much stronger than ordinary casting, and the steel bushing being hard are more durable than iron and can be replaced when worn out.

The No. 3 Thresher, usually furnished with our three-horse power, has abundant capacity, and is a light, strong and reliable machine. Weight of power about 3,500 pounds, and thresher 1,800 pounds.

We also make to order four-horse powers which are constructed upon the same general plan as the three-horse, but with materially heavier main shafts, and with a center bearing for the track plank. With this power and our No. 2 thresher a machine of large capacity is secured, and is in some sections regarded with great favor.

THE WESTINGHOUSE TREAD POWER MACHINES.



Two-horse Power and No. 4 Thresher.

This cut represents our two-horse machine mounted and set for use. The power is double geared, has 31 plank and track rods, cast links with 1 inch bearing for rods, five-inch track wheels and steel main shaft. It is in every respect a substantial and efficient power, and adapted to all the uses farmers require light power for; such as threshing, feed cutting, wood sawing, &c. Without claiming for it marvellous ease of running, we believe it to be as free from friction as any, and that if proper attention to speed of travel of team is given when comparing it with others, as favorable results will be obtained. It is quite common in making such comparisons to ignore the points which should determine the actual merit of powers. Single geared or low double geared powers apparently run easy, but it is always at the cost of a rapid walk of the team. Our power is geared quite high, and therefore may require a little more elevation, but the team will walk at an easy gait and endure the work better than at a less elevation and more rapid walk.

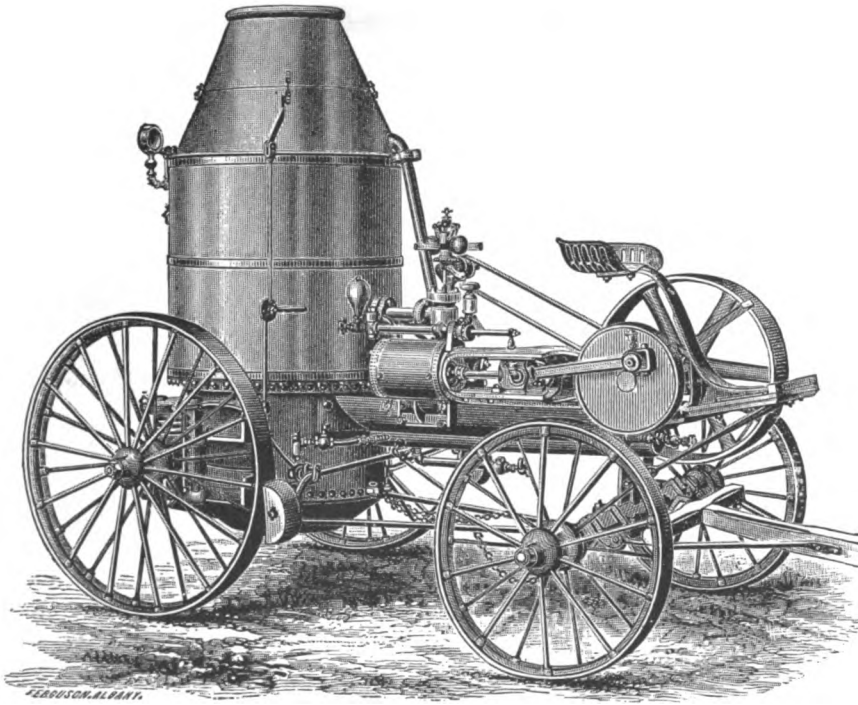
Our four horse thresher is well adapted to the two-horse tread-power, and is beyond question one of the most complete and satisfactory machines in the market. Weight of two-horse power 2,300 pounds mounted, or 1,800 pounds unmounted. Thresher mounted 1,600 pounds.

THE WESTINGHOUSE AGRICULTURAL ENGINE,

PORTABLE and TRACTION.

Six, Ten and Fifteen Horse-power.

Adapted to all purposes on the Farm for which light power is required, and especially designed for Road work.



This Engine has been introduced throughout the country, and has a reputation unequalled by any in the market for *economy, efficiency, durability and lightness.*

Many improvements have been made since its first introduction, with a view to meeting the demand for more perfect machinery, and of correcting any defects which a new engine would naturally develop, but our original design of constructing an engine which should be as light as would be consistent with durability and effective power, be economical in the use of fuel and water, be safe and convenient to handle and operate, has been kept constantly in mind and acted

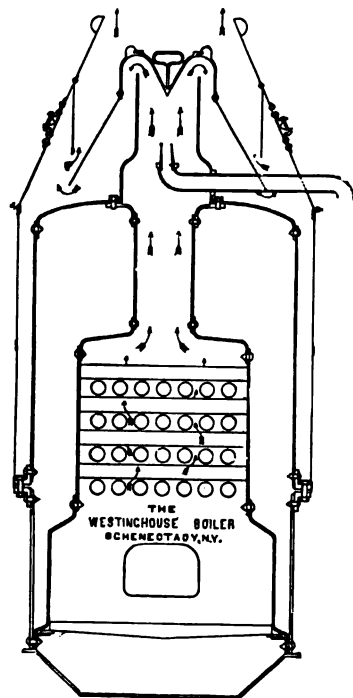
upon to the best of our ability. As a result, we are able to offer these engines in the fullest confidence of being able to please and satisfy all who may purchase them. The first engraving represents the plain or portable form of our engine. It is made of three sizes, 6, 10 and 15 Horse-power. In making this rating, we have kept within the limit of safety, preferring to under-rate rather than the opposite. A material increase over these ratings can be had with good management, and they may be depended upon as being fully equal to many engines that have higher rating.

To more fully illustrate some of the special points wherein we claim advantages to exist in our engine, and not susceptible of being understood from an engraving, we make the following brief description of the most important parts, viz. :

The Boiler.

First impressions obtained from reference to our engravings are, that it is of the ordinary vertical type. It is, however, in its interior construction and general principle radically different, as will be seen from the sectional view connected herewith. Instead of vertical fire tubes, ours are water tubes, through which a constant circulation is maintained, and they are placed horizontally in cross sections.

The boiler is made of two parts, the lower one forming the fire-box and containing the tubes, while the upper one is a shell which surrounds the tubes and composes the water and steam space. The two parts are joined by strongly bolted rings at their intersection, in connection with the vertical smoke tube at the top, and are designed to be taken apart when it is necessary to clean the interior of the boiler or to replace or repair the tubes. When the upper section is removed, every tube and all the surface which is liable to scale becomes accessible and may be thoroughly cleaned. This feature is one of importance, and is not to be found in any other boiler that we know of. By making use of the facilities thus afforded for cleaning the boiler, it will always retain its steaming qualities, and not be constantly losing as those do which require the flues to be taken out for cleaning, and that have otherwise inaccessible parts. We *jacket* our boilers with heavy sheet iron, as shown in the sectional drawing. The space between the shell and jacketing receives and holds the waste heat from the furnace and thereby affords the fullest protection against the action of the atmosphere, which is equivalent to the saving of considerable fuel, besides favorably affecting the production of steam. For the purpose of preventing the escape of sparks from the stack, we have devised the form of top illustrated by our engravings, and after long continued and the most thorough tests, we have found it the nearest to a



perfect spark arrester of all the many plans and devices that have been brought to our notice. It does not require a cistern filled with water to catch sparks, or screens to fill up and stop the draft, but is always clear and ready for action. A peculiarity of its construction enables the use of a larger exhaust nozzle than even a straight out pipe requires, and thereby reduces the back pressure upon the engine. The steaming qualities of our boiler are of the best, and fully equal to sizes of engines connected with them. We make all of our boilers from the best quality of iron, and the cylindrical form of all the parts subject to strain gives unusual strength and an additional element of safety. They are set upon springs when applied to mounted engines, and every part of them carefully made and tested under a high steam pressure, both before and after connecting the engine part.

The Engine.

Our engravings correctly represent the main points of our engine. It has a short, quick stroke, and for this reason is made lighter than the large, long stroke engines. The bed or frame contains the heater, and is securely bolted to the fire-box portion of the boiler. The cylinder, steam chest, guide and boxes are all in a single casting, and the cylinder and guides are bored from one position in a lathe. Mechanical exactness in the relative positions of these essential parts is thereby secured, and a certainty that the piston and crank shaft are in line. The engine and its bed-plate being connected with the lower portion of the boiler, brings the greater part of the weight below the center and removes all danger of turning over when on difficult roads. This is a matter worthy of consideration, when, as an additional result of such an arrangement, all the working parts of the engine are brought within easy reach of the operator, and does not in any way affect the strength of the boiler. Every needed and desirable appliance for rendering the ENGINE EFFICIENT, DURABLE AND CONVENIENT, is furnished with it, including Adjustable Governor, Pop Safety Valve, Steam Gauge, Feed Water Heater, Direct Acting Pump, Whistle, Blower, Brake, and a full supply of wrenches and fire tools. Every bearing and connection has simple means for taking up lost motion, and in fact nothing has been omitted which experience has shown to be desirable.

DIMENSIONS.

4-horse, Diameter of Boiler, 25 inch.	Number of Tubes, 54-1½ inch.	Cylinder, 4¾ in. x 5 in.	Fly Wheel, 24 inch x 4¾ inch.	Weight with wood Wheels, 2,500 Pounds.
6-horse, Diameter of Boiler, 30 inch.	Number of Tubes, 42-2 inch.	Cylinder, 5¾ in. x 7 in.	Fly Wheel, 30 inch x 5¾ inch.	Weight with Iron Wheels, 3,800 Pounds.
10-horse, Diameter of Boiler, 36 inch.	Number of Tubes, 56-2 inch.	Cylinder, 7 in. x 7 in.	Fly Wheel, 30 inch x 6¾ inch.	Weight with Iron Wheels, 4,400 Pounds.
15-horse, Diameter of Boiler, 40 inch.	Number of Tubes 81-2 inch.	Cylinder, 8 in. x 8 in.	Fly Wheel, 36 inch x 8¾ inch.	Weight with Iron Wheels, 6,200 Pounds.

TESTIMONIALS.

From Newton J. Brackin, Hockessin, Del., Feb. 28, 1885.

The steel teeth I got of you gave me splendid satisfaction, and I am thankful for this improvement. The Thresher worked better this year than ever. I have run my machine four years, and it is as good to-day, nearly, as it ever was. I can pull out 400 or 500 bushels of wheat per day and 1000 bushels of oats per day with ease, in fact no man can measure it; it lays all other machines to one side. I have threshed over 100,000 bushels of grain, and all it has cost me for repairs is about \$4.50, except the teeth.

From Levi Hall, Mosherville, Mich.

After having eight years' experience in steam threshing, and having handled seven different makes of threshing engines, including the Westinghouse Ten Horse Engine sold by A. Storms to Moore & Southwell, can say that the Westinghouse is the most complete agricultural engine I have yet used, having so many superior points to recommend it, being so much lighter, requiring so much less fuel and water, convenience in taking up wear of parts, having the strongest traction and most perfect Spark Arrester, which is of great importance to threshers as well as farmers. I can safely say it will run with one-third less wood and water than any other engine I have ever used, and would recommend the Westinghouse to all brother threshers.

From Miller & Russell, Marcelline, Ills., Jan. 1, 1885.

The Westinghouse Ten Horse Traction Engine and No. 1 Combined Clover and Grain Thresher bought of you last season gave us entire satisfaction. The engine uses very little fuel and water; steams easily, and is easily understood and managed. The machine as a Grain Thresher is equal to any other we ever saw, and the Huller beats any regular Clover Thresher with which we are acquainted. The cylinder in the Separator is the finest threshing cylinder we ever saw; did not have a loose tooth during the season.

From A. C. Hartwell, Medora, Ill., Nov. 4, 1884.

I have just finished threshing, and though failure was predicted, the little engine has not been found wanting, either in its traction powers or

in running the thresher. I pulled my outfit up a hill, where, in a trial, the ——— 12 horse utterly failed, and the ——— barely made it with 130 pounds steam. My engine blew off at 110 pounds, and done the work comfortably. The trials were made without any horses, engine in front with water tank and thresher behind. Every one says the machine as a clover thresher is a complete success, although the crop here was badly damaged by the rains. As a grain thresher the farmers all want it.

From O. P. & J. C. Showers, Prairie Home, Ill., 1884.

The Ten Horse Traction Engine and 36 inch Separator we bought of your agents Archer & Locher, of Decatur, has given us entire satisfaction. Our Engine never stuck on the road, we never lacked for steam, and used from five to seven bushels of soft coal per day, threshing from both sides. The Separator has given universal satisfaction to all our customers, who have promised us their jobs next season. We have threshed 1,000 bushels of wet oats in five hours. All the farmers who have seen our rig say we have the best and most complete threshing outfit, and we know it. We were challenged to pull against a — & — traction rig, but the party failed to come to time.

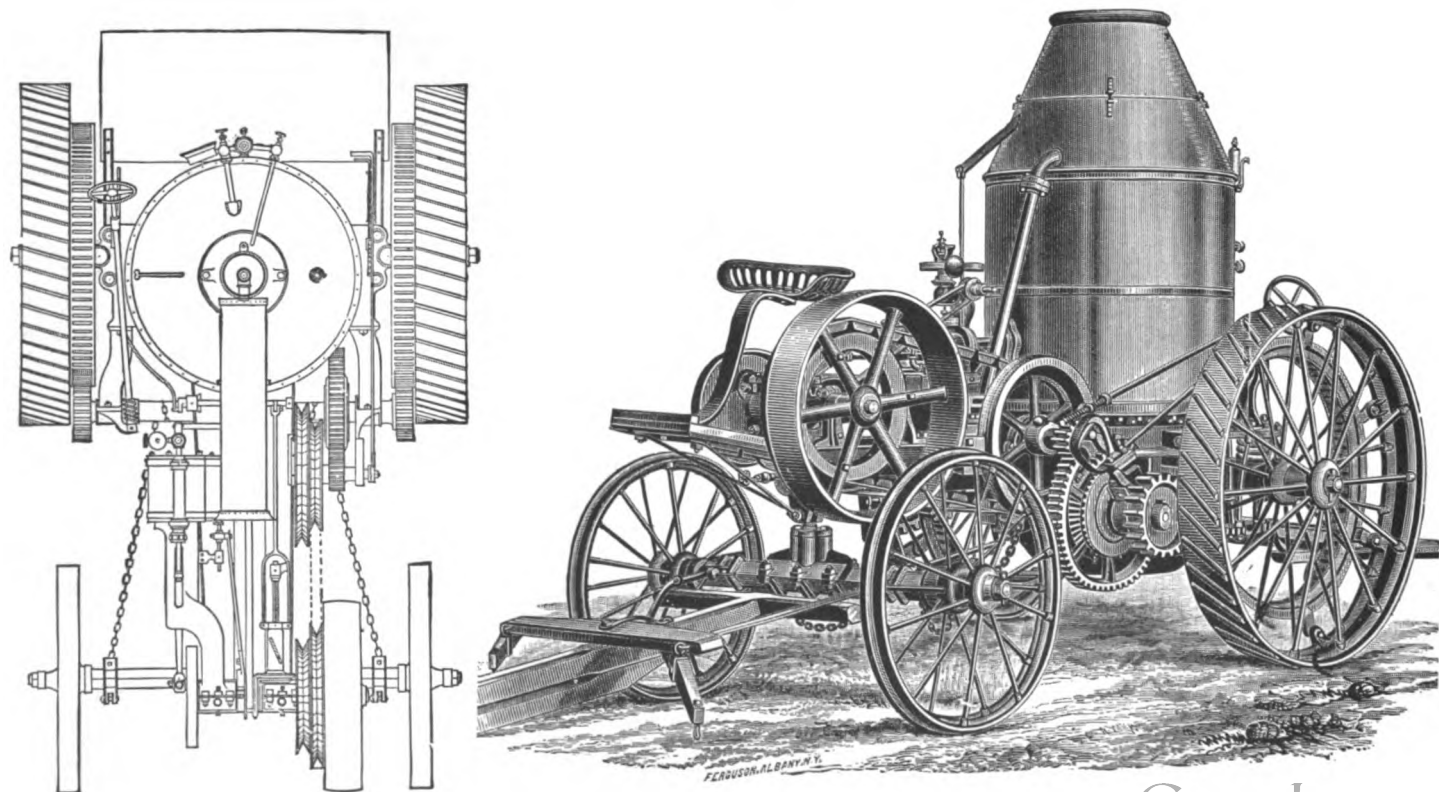
*From Cooper & Underwood, Harford Mills, Cortland Co., N. Y.,
February 20, 1885.*

We want to tell you something about our threshing. We have threshed 100 bushels in 18 minutes and at another time 200 bushels in 49 minutes. We do not blow over a kernel or leave one in the straw. We are willing to bet \$500 to \$100 that there is not another made in the world that can beat yours. I have run threshers 13 years and have run eight different kinds and never run any machine until I run yours.

From W. H. Allison, Limerick, N. Y.

I have followed the threshing business for the past 17 years, and my experience, as you know, is not very limited, and I think I know what a good Threshing Machine is when I see it, and when good threshing is done. I can say with pleasure that the Westinghouse is the best running Thresher that was ever in this county, and is the best in many ways, that I can explain to any one that will call and see the one I have.

THE WESTINGHOUSE TRACTION ENGINE.

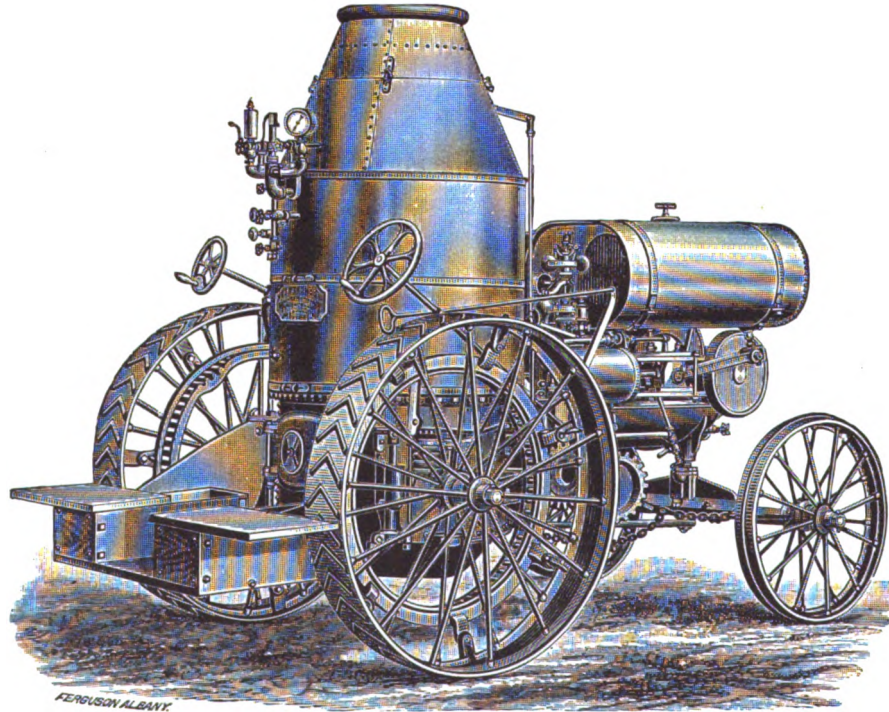


THE WESTINGHOUSE TRACTION ENGINE.

6, 10, and 15 HORSE-POWER.

The engravings on the preceding page illustrate quite fully the plan employed for applying traction to our engine. It consists of *large and strong Driving Wheels, Open Cog Main Gear Wheels, A Three Pinion Compensating or Differential Gear, and our improved Friction Belt Attachment.* In the Friction Belt we claim to have made a decided improvement, and extended use has proven its efficiency. The following advantages result from it, viz.: The belt is of V shape, and runs upon pulleys with corresponding grooves. The pulleys are so arranged that they may be drawn apart by a tightener, and as much strain given to the belt as the work may require. The power communicated from the engine is therefore dependent upon the friction of the belt, and any unusual obstruction encountered while traveling will cause the belt to slip, and thereby prevent breaking up the gearing; and it also affords the means for starting gradually and of getting out of difficult places. These features will receive ready appreciation from any one who has had experience with tight geared engines. When the belt is released by the tightener, the driven pulley may be brought in contact with a brake of the most powerful kind. Another important advantage gained by the use of the belt, is that of using two sizes or cone pulleys, by which means a change of speed can be quickly made. On smooth and level roads a fast speed may be had, and on rough or hilly roads, where more power and less speed is desired, the required change can be made. The two speed plan is adopted on the Ten and Fifteen Horse sizes. For the Six Horse size, only one size of pulley is used, furnishing speed in proportion to the lighter power. All of these engines are provided with a *simple and reliable reversing apparatus*, and are so arranged that the handling may be performed by one person upon the fireman's platform. A *steering apparatus* may also be applied to any engine, although we do not recommend its use while running upon public highways. It is better and safer to depend upon a team to guide. The weights of the several sizes (6-horse, 5,700 pounds; 10-horse, 6,700 pounds; 15-horse, 9,800 pounds, with water in) is so much less than the average run of engines that this of itself should commend them, when it is considered that weak bridges and soft ground are frequently encountered. Also the form of boiler we use makes it entirely safe in going up or down hill without carrying an excessive amount of water. The above-named points, in connection with general features explained under the head of plain engines and common to both, we believe sufficient to entitle them to the most careful consideration.

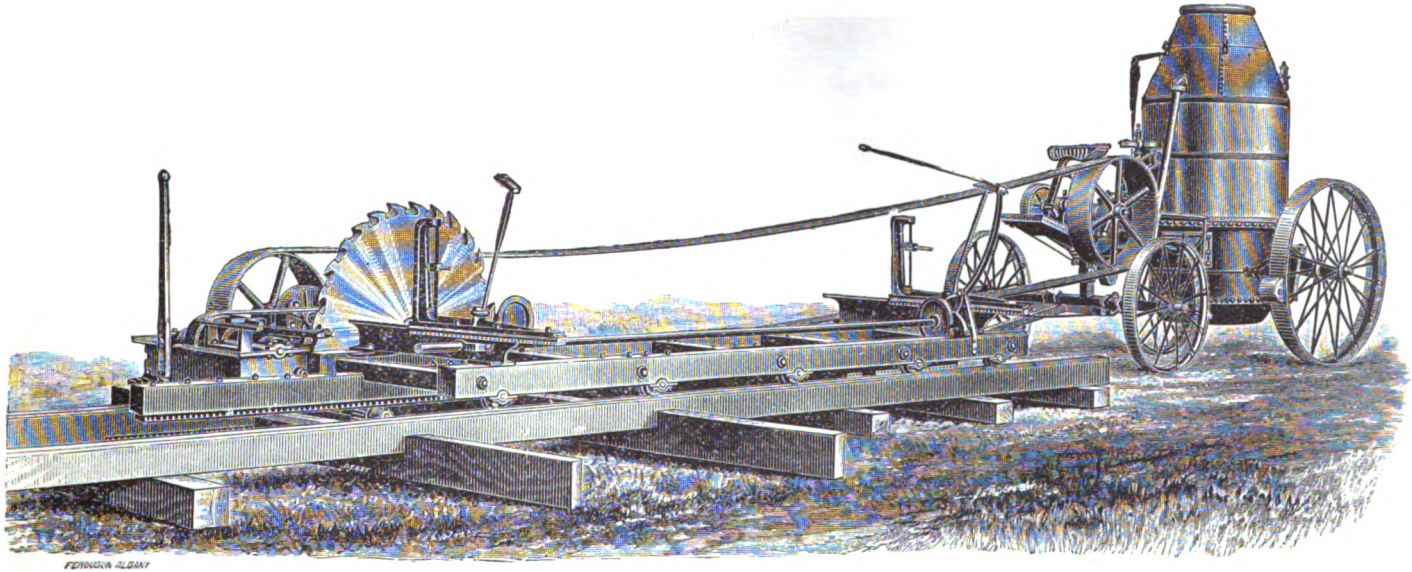
THE WESTINGHOUSE ROAD OR PLOWING ENGINE.



The above engraving represents our 15-Horse Traction Engine, with Water Tank located over the front part, and provided with Special Platform and Coal Bunkers. It is an engine of unusual capacity, and is designed for Plowing or Road work. When required, the face of drivers may be made 16 inches wide. This engine in complete working order, and with two barrels of water in the tank, weighs about 10,000 pounds, which is less than the weight of the average 10-Horse Engines in common use.

THE WESTINGHOUSE CIRCULAR SAW MILL.

21



The accompanying engraving is of our Portable Saw Mill and is designed to supply the demand for Mills of moderate price and capable of being operated by Portable Engines of 10 to 15-Horse Power.

It is thoroughly well made and has a Cast Iron Husk or Frame, Steel Mandril, Adjustable Boxes, Friction Feed and Lever Set, and is in every essential particular well adapted to the work it is designed for.

One of the important points to be considered when a light power is to be used to drive a mill, is that of motion to be given the saw. It is quite a common mistake for inexperienced men to run the saw too fast, and as a result conclude that their power is too light, when a slower motion would increase the capacity of the Mill perceptibly. We recommend for 10-Horse Power Engine that a 50-inch saw should run about 300 times per minute. With a 15-Horse Power the same saw may be run 400 times per minute, and Pulleys will be made on our Mills to give these speeds. The Regular Mill, for which price is given in our list, will have 16 feet carriage, two Head Blocks, and 40 feet of Track Irons. An additional Head Block and Extra Carriage and Track Irons will be furnished to order. Foundation timbers must be provided by the purchaser.

TESTIMONIALS.

From J. D. Layman, Geo. N. Henry, Wm. D. Henry, Pullman, Whitman Co., Wash. Ter., 1882.

It is with pride we would state that we purchased your pioneer machine for this part of the territory known as the Palouse country, bounded by Snake river on the south, Idaho on the east, and the Northern Pacific Railroad on the north.

As we were engaged to assist in moving the machine from the river into the country, we were so favorably impressed with general appearance and construction of the machine that we purchased it on the way, on condition that it should prove satisfactory on trial.

And now we have run it through the season in all kinds of grain, flax, and timothy, and pronounce it the boss in every respect, and can back our statement by the farming community where we have threshed. As crops were short this season we did not expect to get but little to do besides our own, but we have been kept busy and could not thresh for all that wished to engage us. The separating and cleaning arrangements of this machine are such that it seems to stand heavy crowding, and don't carry over on the sieves or in the straw.

There has been much complaint here of machines carrying too much flax over with the straw, but the lifting fingers in connection with beater and picker in yours, makes complete separation from the straw, and the seed comes out cleaned, ready for market, and by means of an ingenious improvement, volunteer wheat, barley and white oats, so common here among flax, is separated as it is sifted over flax sieves, and delivered in half bushels by itself, thereby preventing the carrying of grain repeatedly over the sieve and loading it, as well as the elevator, and if grain is passed repeatedly through the cylinder it gets choked up and mixes with flax seed, which causes a dock by purchaser. Were we to state the actual amount we have threshed at times, under favorable circumstances, it would seem almost incredible to some, especially in the item of flax. From what we hear, your machines have a great future in this country.

From J. F. McLean, Miller of Grangeville Mill, Grangeville, I. T., 1882.

I notice that wheat threshed by the Westinghouse Machine is cleaned better and cracked less than any other wheat that comes to this mill.

From John A. Swart, Mt. Idaho, Idaho Ter., 1882.

Having bought one of your Three Horse Endless Chain Powers and small Separators from your branch house manager, Mr. G. P. Dart, I will say the machine far exceeds my most sanguine expectations, and does much better than recommended to me. My first trial was on long, heavy timothy, very damp and tough. In 1½ days I ran out 187½ bushels of nice clean seed. Did not expect over 50 bushels from the straw threshed. In 3½ hours have threshed 366 bushels of oats straw, wet, very long and not bound. Am in hopes I will get some good dry grain to thresh to show what I can do. As to the Three-Horse Tread Power, will say I think it is the power for all frontier farmers, being adapted for threshing, chop mill, wood saw, or for small saw mills for making fencing; it being very economical, requiring no driver, the governor regulating the motion and furnishing as much power as any Six Horse Sweep Power; power is apparently durable, being well made and of good material; is not liable to get out of order; have worked several horses and mules for trial and find no trouble in breaking them in, using no harness. Will positively say I have the most economical rig in this country, doing the work without a large gang of men and horses.

From John Riggins, H. Hanson, and Wm. Wallace, Mt. Idaho, Idaho T., 1882.

We, being farmers and neighbors of Mr. J. A. Swarts, and who have been helping him thresh with the above machine, we cheerfully say it is complete and does much faster work than we thought could be done with three horses. Power being steady gives a good grain-saving motion and no uneven strain to cause break downs. We think it is the best machine for this country where crops are small and expense is considered, being just the machine to run with either a ten or twelve foot header, the power being convenient for many purposes. We are confident that no big machine could have done more or better work in Timothy, and I done good work in oats and barley under very unfavorable circumstances. We are anxious to see it thresh some good wheat.

TESTIMONIALS.

From S. Troutman & Sons, Colebrook, Ohio, 1882.

The Ten Horse Engine we bought of you in 1880 gave No. 1 satisfaction to both farmers and owners.

We have turned off as many jobs as we have threshed, while the _____ machine has to have a man to go in ahead and look up the jobs. But they all see and know the Westinghouse don't need a runner on the road and takes the jobs from under their nose. The Westinghouse is the best machine on the Western Reserve; it beats them all for saving grain and clean threshing. The combined machine will thresh and clean any kind of seed or grain that a farmer raises. We can thresh it all in one trip. It is money saved to both farmer and thresher. We will challenge to put our combined Grain and Clover Machine up against any other regular Clover Huller or Grain Thresher on the Western Reserve for fast threshing, clean threshing and good cleaning. Will give \$10.00 to any man that can overload our sieves or Separator.

From G. P. Webster, Lipscomb, Maury Co., Tenn., 1882.

In regard to Westinghouse Thresher, would say I have used three other style machines and consider the Westinghouse far superior to any, both as a Grain Thresher and Clover Huller. I have done more work hulling than any B _____ regular Huller in my section of country.

From A. J. Carver, Hermitage, Tenn., 1882.

Having had considerable experience with your machinery, would state that as a Grain Thresher it is equal to any grain machine I ever saw, and as a Clover Machine it is the best I ever saw. I have operated three of your Combined Grain and Clover Machines.

From Mr. J. L. Smith, Summit Town, Summit Co., O., 1882.

I have bought one of your combined machines and I must say it is the *boss* machine. I started threshing the 22d of July, and threshed until December 5. I haven't figured up yet how much I have threshed, but have nearly earned the machine. I have taken the lead through this section. The people fancy the *Huller* very much. I have hulled 10 bushels clover seed per hour, cleaned it ready for market.

I must say your engine is the best in this locality; we move it over mud and ice. I had no trouble so far; the roads are very icy, but we got over them like a top. In this same place there is an engine which got stuck most every day. I have hauled through mud, sand hills and ice, and haven't thought of getting stuck yet. My engine is a 10 horse traction of the Westinghouse manufacture.

From George B. Halsey, Addison, Mich., 1882.

I have been the one who has run the machine, and I will say it is the most perfect combined machine I have seen. I have followed threshing business 26 years, and have run most kinds of machines, and this one takes the *cake off of them all*. I threshed and hulled 25 bushels and 3 pecks of clean clover seed in 4 hours, and I think that beats any of them around here, and I have not been to any expense for repairs.

From J. W. Williamson, Green Hill, Tenn., 1882.

The combined Grain and Clover Machine I bought of your agents, Hillman, Buford & Corbett, at Nashville, Tenn., in 1880, has given entire satisfaction. I hulled 2,000 bushels clover seed during season of 1880 and '81, and my patrons were highly pleased with the kind of work the machine did. I consider it the best *Clover huller* in the market, having run other kinds; it is equally a good grain machine. I used the Clover Huller in threshing German Millett last year; it done splendidly, cleaning the seed from the small pods, which no machine I had used *before would do*.

From Blair Stevenson, Hibbsville, Iowa, 1883.

The steam rig we bought last season gives entire satisfaction. I have used it over all kinds of roads and have had no trouble. I have pulled through snow drifts that was over the front axle tree and the little engine was not found wanting. I threshed on an average about as much in one day as the horse power machine did in two.

From Edgar B. Terwilliger, Elmira, N. Y., 1882.

I have had 14 years' experience in threshing machines, and I think the Westinghouse is the best. I have a No. 2 Thresher and Six Horse

TESTIMONIALS.

Engine. Have threshed with it 1,000 bushels oats a day, and only used 270 pounds of soft coal. Have threshed $3\frac{1}{2}$ bushels per minute and cleaned it fit for market; it gives perfect satisfaction to all the farmers. I bought this engine in July, 1880, and threshed that season; then I put it in my shingle mill and run that. It consists of a shingle cutter, jointer and drag saw which I run all at once and had plenty of power, used shavings for fuel. I threshed again this fall, then I put it to a hay press. It has not stood still two weeks since I had it, and it is in as good condition as new.

From J. R. Mack, Wilson, Pa., 1882.

I have run a Westinghouse & Co.'s Six Horse Engine and No. 2 Separator for two years, and find I can do all one set of men can stand, in years before I have run a Ten Horse Machine. I can do more with the Six Horse Engine than with ten good horses. I have threshed falls, and pressed hay winters. Am pressing hay now, and can press from 15 to 20 tons per day; have plenty power. If I should buy another it would be a Six Horse Engine and No. 2 Separator. I have run lots of days on one flour barrel of coal that costs 30 cents. I have threshed about 50,000 bushels of grain this season and pressed about 300 tons of hay. My engine is all right; has cost nothing for repairs. I can thresh from 1,200 to 1,500 bushels oats per day if got to me in shape. I thresh to make money and not for the fun of it. This engine is light to draw around. I have a team that weighs 2,000 pounds; they draw the engine and tank all the fall and we have got a hilly country to get around in.

From J. B. Howe, Nelson, Pa., 1882.

In regard to the working of my engine and separator, they both work to my satisfaction in every way. I bought of W. F. Palmer a Westinghouse Six Horse Engine and No. 2 Thresher. I received it on the 10th of August, 1880; commenced work the same day. Threshed through the fall and then run a Dederick Hay Press up till June, 1881, without one cent expense for repairs. Commenced to thresh again 20th July, 1881, and run till December. Since that time I have run the engine to hay press to present time. I do not see but it runs just as well as the

first day, and don't see any reason why it will not last for a long time with proper care. For our hilly country I think the six horse is large enough to do all the work necessary. It will thresh all we can get men to handle here, and pretty fast to suit the farmers, and is convenient to move on rough ground. A Westinghouse Ten Horse Engine and large Separator may suit threshers in your vicinity better, but the Six Horse rig is large enough here.

From Chas. Hurd, Holly, Mich., 1882.

I have just closed my season's threshing with the little engine No. 150, and will say that I am entirely satisfied with it in every way. I run between fifty and sixty days on grain, and have used the engine 40 days on clover hulling. I run another huller for another man twenty days after a F. C. — Engine had failed. They could not hold steam in cold weather. I am often asked if I have power enough to thresh grain. I have threshed 950 bushels in one day, and done it easy, which is more than any other machine done here this year.

From Marriott and Taylor, Osseo, Mich., 1882.

The No. 0 Combined Clover and Grain Thresher we bought of you last year gives us and all our patrons the best of satisfaction, and is decidedly the lion of Hillsdale County. All unite in saying the little steamer is a perfect gem. She uses but little wood or coal and keeps the thresher crying more feed. We bought the steamer in 1879, run it ever since, and it works like a charm. On the 23d day of August last we threshed for Wm. Carter (who lives 4 miles east of Hillsdale City) 626 bushels wheat and 466 bushels oats in 8 hours. Also in the fall hulled and cleaned for A. Carpenter 132 bushels clover seed in 13 hours. These are facts and can be vouched for by good men. We merely give you these figures, feeling it a duty as well as pleasure in recommending your machinery. We have had about twenty years' experience in threshing and know what we are writing, and have no hesitancy in recommending your machines as the very best in use.

P. S.—The cylinder can't be beat in the world.

TESTIMONIALS.

From L. M. Babcock, Watertown, N. Y., March 16, 1885.

I have had experience with Threshers besides those you make, and can say with pleasure that the one I had from you has given perfect satisfaction. It is as good to me as a new machine, and I have used it two seasons. It has given me no trouble from the first day I put it into use, and my bill for repairs, through any fault of the makers, is nothing.

I have threshed, many times, four bushels per minute, and without trying to see what I could do have threshed in one hour and twelve minutes 200 bushels. I can recommend the Westinghouse, and you can refer parties who think of buying a Thresher to me.

The machine I have is a No. 1 in more respects than one.

Wm. Mattran, of Evans Mills, N. Y., says:

The Westinghouse is the best machine running and I would not have any other made. I have examined other Threshers and know the Westinghouse is the best. I can thresh with my No. 4 Thresher 100 bushels of Oats per hour. I have done this, this year, and it is the fourth fall I have run it. It does good clean work and seems to be as good as new.

D. Fox, of Tremains Corners, N. Y., September 14, says:

Yesterday afternoon I began work at 1 P. M. and stopped at 6, having threshed with my No. 2 Cleaner 400 bushels of barley; on another day I began work at 8 A. M. and stopped with my machine ready to leave 12 M., after threshing 445 bushels of oats.

Mr. J. B. Atwater, of Brownville, N. Y., says:

I like my Thresher I purchased of you this year. It is the third of the Westinghouse Threshers that I have owned and can recommend them as being first-class in every respect.

From John G. Wood, Pillar Point, N. Y.

Having had more experience than the most of threshermen, having threshed twenty successive falls, I feel like giving the public the benefit of my experience, having tested a number of machines of other manufacture, would advise all about to purchase a machine to try the Westinghouse, as it surpasses all other machines in durability, amount and quality of work, and has driven all machines of other manufacture

entirely from the field in this section, and is certainly the boss machine without a single rival.

From Geo. S. Manley, Point Peninsula, N. Y.

I can recommend the Westinghouse Thresher and Horse Power. I have had one now for two years, and if I were to buy a dozen I would buy yours every time. Every one who has seen it says it does the best of work. Have threshed 430 bushels of oats in 3 hours. Your machines are first-class in every respect.

From Geo. S. & A. A. Curtis, East Rodman, N. Y.

I have had some experience with other threshers than the one you manufacture, but for good work and durability, I know yours will take the lead. The cleaner I had from you gives all my patrons the best of satisfaction. I could give names of other cleaners that worked near me, that had a job on their hands to do as good work as I did, and they had to drop the job, as something they could not do.

From A. L. Benton, Rural Hill, N. Y., March 16, 1885.

I feel it a duty I owe you, as well a pleasure to myself, to give you a short history of my experience with your threshing machines. I used other makes of machines a few seasons before trying yours, but they did not give satisfaction. In 1867 I purchased one of your 30-inch Threshers that I run five seasons. It pleased me very much, as well as my customers. I sold it for the reason that I wanted a larger one. I think that it did as good work the last day I used it as the first. In 1872 I purchased one of your No. 1 Threshers. I used that eleven seasons with a ten horse engine, and it always stood the racket. I think it did as good work the last week I used it as ever, which fact proves their durability. Wishing for a larger one I then sold it for ninety dollars, but it was worth more. In 1883 I purchased one of your No. O Machines, in which I find great improvement. I have run this two seasons and have not put in a new box yet. I think I have broken but one spike. My customers speak of it in the highest terms of praise. I will simply say it is perfection. I have examined quite a number of different makes of machines, having seen ten different kinds side by side, but have never found one, that for light running, rapidity and quality of work, simplicity of management and durability, that can compare with the Westinghouse Thresher.

TESTIMONIALS.

From Joseph Courbat, Mallory, N. Y., 1882.

Having purchased the first of your Ten Horse Traction Engines two years ago, I feel it my duty to express my opinion of the engine. It far excelled my expectation as to its power and economy of fuel and water. Having sold the engine I feel more at liberty to state what I think of it.

Now after purchasing the second engine of your last year's style, I find it has many valid improvements in some parts. The steering arrangement is handy; I can steer it in any spot without getting off the tender. It has power enough to draw itself, thresher and tank, all without bothering with a team. I can move from 2 to 4 miles an hour; I like the steering gear management.

From Joseph Groves and Alfred Nelson, near Golden, Ill., 1882.

The one Westinghouse Separator which we bought of your agents, Messrs. H. E. & S. Selby, proved satisfactory. We have threshed wheat, oats, rye and timothy seed satisfactorily to ourselves and customers. The riddles gave us no trouble, requiring no poking or cleaning by hand. We have been to no expense for repairs except for our breakage, caused by accident, which was no fault of the machine, and our machine is as good as new, except the natural wear and tear of weather and dust on the paint. We recommend the Westinghouse Vibrator to any one wanting a first-class threshing machine.

From J. A. Bottorff and S. R. McAnulty, near Golden, Ill., 1882.

The Ten Horse Plain Engine and No. 1 Combined Machine which we bought of your agents, Messrs. H. E. & S. Selby, gave entire satisfaction. We regard the engine superior to any other we have seen for threshing purposes; it is light; two common horses can haul it easily on good roads. It gives all the power required for either threshing grain or hulling clover. For ordinary threshing it requires about 60 pounds steam. The engine does not rock or shake when at work, and the wheels require no clamping or blocking to make it steady. We used very little fuel in doing a full day's threshing; the Separator is all we could ask; it threshes fast, saves the grain and cleans it fit for market. It is easily fed and the riddles gave us no trouble. As a Clover Huller it is equal to any regu-

lar Clover Machine we ever saw, if not superior. We have hulled clover early in the morning when wet with dew, and have also hulled when the clover had been stacked and was wet and damp to the bottom of the stack. In fact we regard our engine and separator superior to anything else we have seen in our 15 years' experience.

From Hillman, Buford & Corbit, Nashville, Tenn., 1881.

We have received statements from a number of farmers in Sumner and Tronsdale Counties, in regard to the perfect working of your machine as a *Clover Huller*. There has been three of the same machines at work in these counties. Farmers and threshers give them a good recommend, and as a Grain Thresher it eclipses all other machines when run properly. We averaged 110 bushels wheat per hour, everything moving like clock work, and as a Clover Huller all have had complete success.

From J. Bottom & Co., Nelson, Pa., 1882.

We have run three of the Westinghouse Six Horse Engines this winter on so many hay presses. The power necessary to run a hay press is greater than that required for any separator in threshing. Our first impression was that we needed a Ten Horse Engine, but after using a Westinghouse Six Horse Engine last winter to operate one press, we found it capable of doing the work, and was lighter to draw around and required less fuel. Our opinion is, that the Westinghouse Six Horse Engine is large enough for any thresher. We have had no bad luck with engine except a few pipes freezing up, and that on account of carelessness of engineer.

From J. F. Burnett, Atwood, Ill.

The No. 9 steam outfit bought through your agent, Mr. James Locher, Cerro Gordo, Ill., is the nearest perfect of any machine I ever handled. I am a practical farmer and engineer and have made machinery a study for 20 years, but have not found a machine to equal the Westinghouse. I ran the machine 52 days, including one wet week, and threshed 32,000 bushels of grain, and the first six days of September I threshed 6,024 bushels. As to fuel I averaged 800 pounds soft coal to 1,000 bushels of

SCHENECTADY, N. Y.
TESTIMONIALS.

27

wheat, or in other words 75 cents to \$1.25 per day. The traction is all that is required; I can pull as heavy a load and travel as many miles in a given time as any engine I ever saw. The separation and cleaning of grain is so perfect that I want no better. In fact *it is the machine* for the thresherman and farmer.

From Harrison Bailey, Deland, Ill.

We have run your separator and horse power two seasons and it gave perfect satisfaction. The third season we bought one of your Ten-horse Traction Engines which did its work effectually both on the road and in the field. It will take about 800 pounds of coal and 350 gallons of water to do a full day's work. During the past year we threshed 40,000 bushels of oats and 10,000 bushels of wheat. How is that for business?

From John Adams, Decatur, Ill.

The Traction Steam rig I bought of you through Mr. James Locher last season is, to use an expression made by the man I threshed the first job for, "a Daisy." I never lacked steam in the field nor on the road; never got stuck, and the outfit has given perfect satisfaction not only to myself but to all my customers. I used about 700 pounds of soft coal per day and 2½ tanks of water.

From J. T. Harshbarger, Ivesdale, Ill.

Mr. James Locher, Cerro Gordo, Ill.:

The machine and engine I purchased of you is giving as good satisfaction as ever. There was grain of all kinds put into it, as well as timothy and millet. My customers all say this is the best thresher and engine in the neighborhood. As regards the engine there is nothing to get away with it for threshing or running on the road; we had no trouble neither way; have run three miles while others run one mile; I am glad I purchased it; have earned \$1,400 during the season.

From Decatur Coleman, Alma, Mich., 1882.

The Westinghouse Thresher and Hüller combined that I purchased through Mr. John Lang, of Sumner, has given entire satisfaction to both ourselves and our customers. We earned \$1,200 during the season, although the wet and grown grain being against us; I think the machine

and engine the best I have ever seen, and would say to any one wanting to purchase to buy the Westinghouse. The engine runs like a charm and the traction attachment is complete and will draw all the rig on the road without trouble.

From William Lang, Sumner, Mich.

The 32-inch Separator we bought of you last season is entirely satisfactory. It threshes fast and clean; I have run 7 different kinds of machines but yours excels them all. We threshed for Calvin Fisher, of Seville, 13 bushels of clover seed in one hour and cleaned it in first class manner. The little engine works complete; it steams so rapidly with so small an amount of fuel, and furnishes so much power, that it beats them all. I have had men try to feed it down, but they never made it out.

From Jacob Lippert, Seville, Mich.

The Westinghouse Combined Clover and Grain Thresher and Ten Horse Engine bought of your agent John Lang, last August, gives us great satisfaction. We are threshing over two counties and can beat any other in the country around us. We could have done much better, but clover is poorly telled. Every one we threshed for in grain and clover thought it the greatest machine out. We have made good wages all the time while others could not pay expenses. We have threshed wheat when you could wring water from it, and threshed it good too. I think it runs easier and threshes faster than any machine I ever saw, and cleans and saves the seed better. When we started out we had no jobs engaged, but we soon had all and more than we could do. One place we went to they laughed at us for having so small a steamer, but after a while we blowed off steam, and the men came off the mow and halloed us to stop, saying they could not stand it to get grain to her any longer without a rest.

From W. H. Miller, Sheridan, N. Y.

I have closed my season's threshing, and have threshed 1,287 bushels of barley, 18,257 bushels of oats, 41 bushels of grass seed and 7,651 bushels of wheat, and have earned \$913. I have a Three-Horse Power and No. 2 Thresher of your manufacture, and consider it the best machine made for all kinds of threshing and for saving grain. It pleases farmers every time, and gives the best satisfaction.

1886.

—PRICE LIST—

1886.

THE WESTINGHOUSE CO.'S →THRESHING MACHINES, ENGINES & HORSE POWERS←

DELIVERED ON THE CARS AT SCHENECTADY, N. Y. FREIGHTS MUST ALWAYS BE PAID BY PURCHASERS.

COMPLETE SETS,

INCLUDING ENGINE OR HORSE POWER AND THRESHER.

All Machines under this heading have both Power and Thresher mounted, Main Driving Belt, small Belts, Sieves for Grain (Clover Sieves with Combined Clover and Grain Machines), Wrenches, Extra Spikes, and for all except numbers 4, 9 and 10, two Section 20 feet Stackers are sent with Complete Sets. Elevator for Bagging and Tallying Grain always an Extra, price \$25.00

HORSE POWER SETS

No. 1 Set, 10-Horse Lever Power and No. 1 Grain Thresher	\$675 00
No. 2 Set, 8 do do do 2 do	650 00
No. 3 Set, 6 do do do 3 do	590 00
No. 4 Set, 4 do do do 4 do (12 feet Stacker)	565 00
No. 5 Set, 10 do do do 1 Clover and Grain Thresher	775 00
No. 6 Set, 8 do do do 2 do do	750 00
No. 7 Set, 6 do do do 3 do do	690 00
No. 8 Set, 4-Horse Tread Power and No. 2 Grain Thresher	790 00
No. 9 Set, 3 do do do 3 do No Stacker	635 00
No. 10 Set, 2 do do do 4 do do	535 00

ENGINE SETS.

No. 11 Set, 10-Horse Plain Engine and No. 0 Grain Thresher	1,460 00
No. 12 Set, 10 do do do 1 do	1,440 00
No. 13 Set, 10-Horse Traction Engine, No. 0 do	1,615 00
No. 14 Set, 10 do do do 1 do	1,615 00
No. 15 Set, 10-Horse Plain Engine and No. 0 Clover and Grain Thresher	1,560 00
No. 16 Set, 10 do do do 1 do do	1,540 00
No. 17 Set, 10-Horse Traction Engine, No. 0 do do	1,735 00
No. 18 Set, 10 do do do 1 do do	1,715 00
No. 19 Set, 6-Horse Plain Engine and No. 2 Grain Thresher	1,395 00
No. 20 Set, 6 do do do 3 do	1,385 00
No. 21 Set, 6 do do do 2 Clover and Grain Thresher	1,395 00
For Traction applied to 6-Horse Engines add	175 00
No. 22 Set, 15-Horse Plain Engine and No. 00 Grain Thresher	1,860 00
No. 23 Set, 15-Horse Traction do do do	2,060 00

GRAIN THRESHERS & COMBINED CLOVER & GRAIN THRESHERS, WITH TRUCKS & STACKERS, SEPARATE FROM POWER OR ENGINE.

					Geared.	Belt.
No. 00 Grain Thresher, 36 or 42 inch Cylinder, 20 feet Stacker	.....				\$510 00	
No. 0 do do 32 or 36 do 20 do	.....				\$480 00	460 00
No. 1 do do 30 or 32 do 20 do	.....				400 00	440 00
No. 2 do do 30 do 20 do	.....				440 00	480 00
No. 3 do do 30 do 12 do	.....				385 00	395 00
No. 4 do do 26 do no Stacker	.....				335 00	315 00
No. 0 Clover and Grain Thresher, 32 or 36 inch Cylinder, 20 feet Stacker,					590 00	560 00
No. 1 do do do 30 or 32 do 20 do					560 00	540 00
No. 2 do do do 30 do 20 do					540 00	530 00
No. 3 do do do 26 do 12 do					.....	465 00
No. 1 Bean Thresher, 32 do 12 do					.....	475 00

If Trucks or Stackers be left off any of the foregoing, a discount of \$40 will be made for each Power or Thresher Truck or 20 feet Stacker, and \$25 for 12 feet Stacker.

We furnish with the above Threshers, Sieves for Grain, and Clover Sieves with Combined Clover and Grain Machines, small Belts, Oil Can, Wrenches, Belt Punch, extra Spikes and extra Pinions for Geared Machines. No Main Belt or Tumbling Rods are sent with them when separate from Powers or Engines. Elevator for Bagging and Tallying Grain always Extra \$25.00.

DIMENSIONS OF CLOVER AND GRAIN THRESHERS.

Size.	Cylinder.	Sieves.	Separator.	Shaking Forks.	Power required.
00	12 Bar, 17 by 36 or 42 inches.	48 x 40	53 inches.	6	15 Horse.
0	12 Bar, 17 by 32 or 36 inches.	42 x 40	47 inches.	6	10 to 12 Horse.
1	12 Bar, 17 by 30 or 34 inches.	36 x 40	41 inches.	6	8 to 10 Horse.
2	10 Bar, 15 by 30 inches.	38 x 40	41 inches.	5	6 to 8 Horse.
3	8 Bar, 14 by 30 inches.	36 x 40	41 inches.	4	4 to 6 Horse.
4	8 Bar, 14 by 26 inches.	30 x 40	34 inches.	4	4 Horse.

◀ PRICE • LIST ▶

— OF —

THE WESTERN ENGINE, HORSE & CO.'S MILLS, & C.



3 9015 02121 9095

ENGINES.

Westinghouse	4 Horse Plain Engine, mounted.....	\$450.00
do	6 do do do do do	875.00
do	10 do do do do do	1,000.00
do	15 do do do do do	1,350.00
do	6 do Traction do	1,050.00
do	10 do do do do	1,175.00
do	15 do do do do	1,550.00
do	15 do do do do 16 inch Face Drivers, for Plowing, with two barrel Tank and Coal Boxes,	1,700.00

HORSE POWERS.

	Mounted.	Down.
12-Horse Lever Power, 2 Rods, no Jack	\$220 00	\$170 00
10 do do do do do	210 00	160 00
8 do do do do do	205 00	155 00
4 or 6 do do do do do	180 00	130 00
Jack for above extra	30 00	20 00
Each extra Rod and Coupling	6 00	6 00
4-Horse Endless Chain Power	350 00	275 00
3 do do	285 00	210 00
2 do do	210 00	160 00
1 do do (only made to order)		145 00

ARTICLES FOR WHICH EXTRA CHARGE WILL BE MADE.

Grain Bagger and Register	\$25 00
Flax, Timothy or Millet Sieves, each	3 00
Main Belting, over 100 feet for Steam Machines, or when ordered separate from complete Machines, at Manufacturer's prices.	

ARTICLES WHEN ORDERED SEPARATE FROM MACHINES.

Patent Swing Gear for Thresher, no Rods	\$25 00
Each extra 10 feet Rod and one Coupling	6 00
Extension Rod	10 00
Truck for Threshers and Lever Powers	50 00
Stacker, 20 feet, with Hoister	45 00
Stacker, 12 feet, with Hoister	30 00

CIRCULAR SAW MILL.

Including 16 feet of Carriage to saw a log 30 feet long, 40 feet Track Irons, 2 Head-Blocks, 52 inch Plain Saw, without Foundation Timbers	\$400 00
Extra for each additional foot of Carriage and Track Irons	3 25
Extra for each additional Head-Block	30 00

MISCELLANEOUS ARTICLES.

We have Patterns for Cross Cut and Circular Wood Sawing Machines, Broom Corn Threshers and Threshers and Shakers, which will be made to order only.

CONDITIONS AND TERMS OF SALE.

All prices named in the foregoing lists are for delivery at Schenectady. Freight must in all cases be paid by purchasers.

Purchasers should be prepared to settle for all machines upon their arrival at shipping destination, subject to our warranty and conditions as named in our printed contract, which provides that all payments which have been made will be refunded in event of the machinery proving unsatisfactory, and when disposed of in accordance with the terms of the contract.

No title will be given to any machinery contracted for either with ourselves or agents, until the stipulated conditions of payment are fully complied with.

Five per cent discount will be made for all Cash payments.

Full price will be charged for one-third Cash, one-third January 1st, 1886, one-third January 1st, 1887, with interest. Rate of interest always to be that customary in this business in the sections where transaction occurs. No sale will be made on time, except where ample security is provided for.

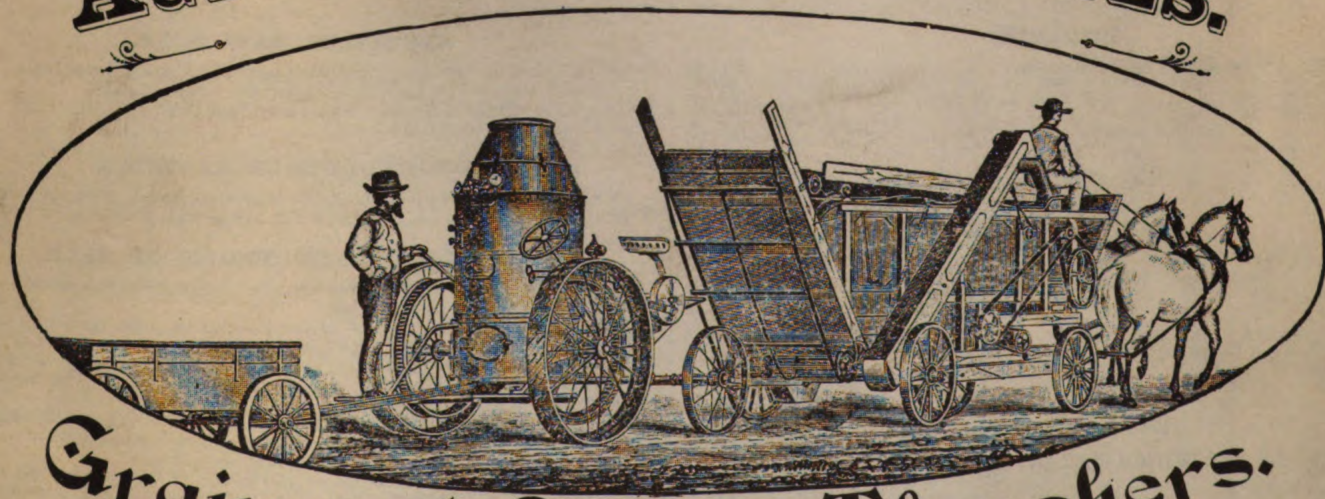
Agents are required to furnish us the original contract, and all orders are taken subject to our approval.

SUGGESTIONS.

Make repair orders plain, and say whether they are for Thresher, Horse Power, or Engine, and give Pattern number of piece wanted, and number of Engine or Machine. Any piece which has no number upon it requires full description of size and shape.

Before undertaking to start a machine read carefully and follow implicitly our printed instructions which should accompany each machine.

The Westinghouse
AGRICULTURAL ENGINES.



Grain and Clover Threshers.
Horse Powers, Saw Mills, &c.

Manufactured at Schenectady, N. Y.